

NAKAGAWA --
Application No. 10/726,660
Client/Matter: 007324-0307160

REMARKS

By this Preliminary Amendment, claim 1 has been further amended, claim 16 has been cancelled and claims 17-22 are newly presented. Accordingly, after entry of this Amendment, claims 1 and 17-22 will remain pending.

In the final Office Action dated March 28, 2006, the Examiner rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Fukui et al. (U.S. Patent No. 3,978,375) in view of Coucoulas (U.S. Patent No. 3,959,874) and Ebbert (U.S. Patent No. 3,898,535). Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukui et al. in view of Coucoulas. The Applicant respectfully disagrees with both of these rejections and, therefore, respectfully traverses the same.

In connection with the filing of a Request for Continued Examination ("RCE") that accompanies this submission, the Applicant has amended claim 1, canceled claim 16 and added new claims 17-22. The undersigned has been informed that claims 1 and 17-22 mirror the claims as allowed in the corresponding Japanese application.

Claims 1 and 17-22 are patentably distinguishable over the references cited by the Examiner because they now recite a component mounting circuit board that combines a number of features including, among them, a resin molded section made of a resin by way of molding so as to cover the circuit pattern and the inner electrical component, the resin molded section having an opening allowing an outer electrical component located outside the resin molded section to be connected to the circuit pattern therethrough after formation of the resin molded section, so that the inner and outer electrical components are interconnectable to each other via the circuit pattern, where the inner electrical component includes a rectifier circuit having input terminals and output terminals and an active element connected between the output terminals of the rectifier circuit and controlled so as to be switched, where the outer electrical component includes a resonance capacitor connected between the output terminals of the rectifier circuit, and where the circuit pattern includes as the electrically conductive plates. None of the references cited by the Examiner describe or suggest such a combination of features, among others. Accordingly, the Applicant respectfully submits that claims 1 and 17-22 are not rendered obvious thereby.

Fukui et al. describes a wiring pattern plate 1 made of copper. (Fukui et al. at col. 2, lines 24-26.) The wiring pattern plate 1 is covered on both sides by an insulating frame 6

NAKAGAWA --
Application No. 10/726,660
Client/Matter: 007324-0307160

(see, e.g., Fig., 6), which is made of a thermosetting material. (Fukui et al. at col. 3, lines 3-7.) Fukui et al. does not describe, among other things, a resin molded section made of a resin by way of molding so as to cover the circuit pattern and the inner electrical component, the resin molded section having an opening allowing an outer electrical component located outside the resin molded section to be connected to the circuit pattern therethrough after formation of the resin molded section, so that the inner and outer electrical components are interconnectable to each other via the circuit pattern, where the inner electrical component includes a rectifier circuit having input terminals and output terminals and an active element connected between the output terminals of the rectifier circuit and controlled so as to be switched, where the outer electrical component includes a resonance capacitor connected between the output terminals of the rectifier circuit, and where the circuit pattern includes as the electrically conductive plates. As a result, the Applicant respectfully submits that Fukui et al. cannot be relied upon in combination with the other references cited by the Examiner to render claims 1 and 17-22 obvious.

Coucoulas does not assist the Examiner with a rejection of claims 1 and 17-22 because Coucoulas fails to supply the deficiencies noted with respect to Fukui et al. Coucoulas describes a method of forming an integrated circuit assembly with an electrically-conductive carrier 13 (made of a ferrite material) onto which a circuit chip 11 is placed. (Coucoulas at col. 5, lines 7-11.) An insulative body 28 covers the carrier 13 and the chip 11. (Coucoulas at col. 4, lines 16-26.) Like Fukui et al., however, Coucoulas also fails to describe or suggest a resin molded section made of a resin by way of molding so as to cover the circuit pattern and the inner electrical component, the resin molded section having an opening allowing an outer electrical component located outside the resin molded section to be connected to the circuit pattern therethrough after formation of the resin molded section, so that the inner and outer electrical components are interconnectable to each other via the circuit pattern, where the inner electrical component includes a rectifier circuit having input terminals and output terminals and an active element connected between the output terminals of the rectifier circuit and controlled so as to be switched, where the outer electrical component includes a resonance capacitor connected between the output terminals of the rectifier circuit, and where the circuit pattern includes as the electrically conductive plates.

NAKAGAWA --
Application No. 10/726,660
Client/Matter: 007324-0307160

Ebbert also does not assist the Examiner in rejecting claims 1 and 17-22. Ebbert describes a mounting frame for electronic components with pins 13 embedded in a frame 12 made of an electrically insulative material. (Ebbert at col. 2, lines 57-67; see also Fig. 3.) Ebbert does not describe or suggest the combination of features recited by claims 1 and 17-22 that include, for example, a resin molded section made of a resin by way of molding so as to cover the circuit pattern and the inner electrical component, the resin molded section having an opening allowing an outer electrical component located outside the resin molded section to be connected to the circuit pattern therethrough after formation of the resin molded section, so that the inner and outer electrical components are interconnectable to each other via the circuit pattern, where the inner electrical component includes a rectifier circuit having input terminals and output terminals and an active element connected between the output terminals of the rectifier circuit and controlled so as to be switched, where the outer electrical component includes a resonance capacitor connected between the output terminals of the rectifier circuit, and where the circuit pattern includes as the electrically conductive plates.

Each of the rejections having been addressed, the Applicant respectfully requests that the Examiner enter this Preliminary Amendment and pass this application quickly to issue.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

PILLSBURY WINTHROP LLP



JEFFREY D. KARCESKI

Reg. No. 35914

Tel. No. 202.663.8403

Fax No. 202.663.8007

Date: June 1, 2006
P.O. Box 10500
McLean, VA 22102